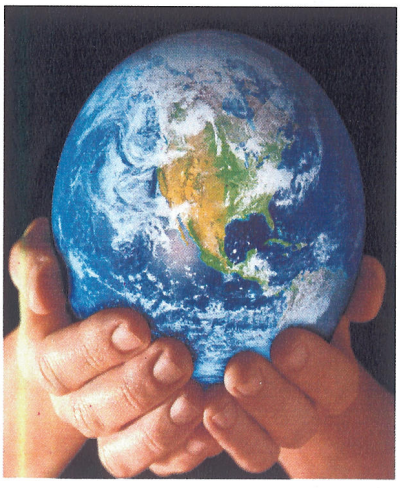
DO 80058

2009 CONSUMER CONFIDENCE REPORT

A Closer Look at Water Quality

Naval Support Activity South Potomac
Naval Support Facility, Indian Head, Maryland 20640-5035

- This is an annual report on the quality of water delivered by the Naval Support Facility, Indian Head (NSFIH) to our consumers at Indian Head and Stump Neck Annex. This report gives information on the source of our water, its components and the health risks associated with any contaminants.
- In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide protection for public health.
- Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or visiting the EPA website www.epa.gov/OGWDW.



"CONSERVATION" IS COOL

- Do you think of water conservation as a positive or negative concept? Be honest. What first comes to mind – a feeling of empowerment knowing you can make a difference, or a feeling of being deprived knowing you need to use less and change old habits. For many, change of any type is difficult. However, to preserve our standard of living and sustain our water resources changes must be made now. Many of us have already seen an increase in our county water utility bills in the form of a graduated billing rate – and so it begins; accountability for our water use habits.

- As Americans, we have lived under the illusion of a "land of plenty" where an infinite abundance of natural resources were at our disposal. Even if we broaden our horizons to include the entire "blue" planet, our assumptions of abundance are an illusion. A study by the University of Michigan in 2006 called "Human Appropriation of the World's Fresh Water Supply" reported although 70% of the earth's surface is covered by water, 97.5% is salt water, leaving only 2.5% as fresh water. And, of that 2.5%, less than 1% is available for direct human uses where access is affordable (i.e., water in lakes, rivers, reservoirs and shallow underground aguifers which allow sustainability through rain and snowfall).

- NSFIH is fortunate to have several of its wells drilled to the area's deepest, Patuxent Aquifer (see Figure [1] on next page). However, Southern Maryland is experiencing unprecendented demands on its water supply with the increase of residential and commercial development. State water management of the most used residential aquifer, the Patapsco, will affect groundwater appropriation permits countywide. It will take a cooperative effort of all Patapsco and Patuxent Aquifer users to ensure the sustainability of Southern Maryland water resources.

- Because lower availability and higher demand will increase water utility prices, conservation methods and devices will become an integral part of the water users' daily routine. The typical American home uses 270,000 gallons of fresh water per year at an annual cost of approximately $405. Devices that have a reasonable return on investment (i.e., small scale use of grey water, dual flush toilets, low use shower and tap fixtures, and whole house water filters) may, in the future, be assimilated as standard items in mid-priced housing. Renovation projects and building of new homes are the most advantageous times to implement state of the art conservation methods. Listed on the following page are several websites that offer creative and cost-effective ways to make conservation cool.

ENCLOSURE(1)

Water Conservation Websites

http://www.awwa.org/resources/Waterwiser.cfm?navItemNumber=1561
http://www.epa.gov
http://www.mde.state.md.us
http://www.greenandsave.com
http://www.StartRightStartHere.com
http://www.earth911.com
http://www.earth-policy.org
http://www.savewateramerica.com
http://www.filterforgood.com

NSFIH continually monitors its drinking water for contaminants. This water is safe to drink; however, some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline.

Safe Drinking Water Hotline - 1-800-426-4791 – www.epa.gov/OGWDW

Water Source Information

- Groundwater from 4 Indian Head wells and 2 Stump Neck wells drilled to the Patapsco and Patuxent Aquifers supply the water for both NSFIH and Stump Neck Annex.

- An aquifer is an underground geologic formation of sand, gravel or rock through which water can pass and is stored. Because the layers of sand, gravel and rock provide a natural filtration, groundwater is usually clear when it is pumped out of the ground; thus, it can be disinfected without prior treatment. NSFIH wells are deep wells and are protected by these layers from most contaminants and bacteria.

Sources of your drinking water include the Patapsco and Patuxent Aquifers.

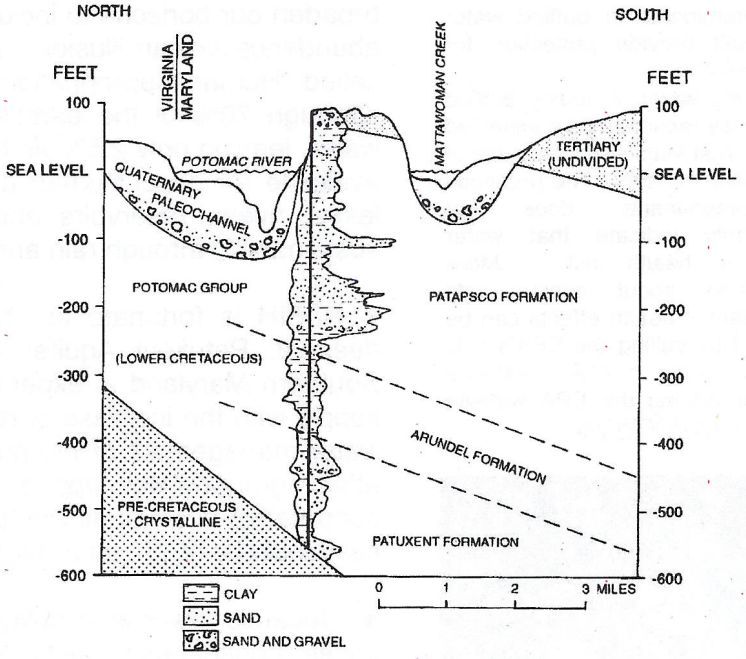
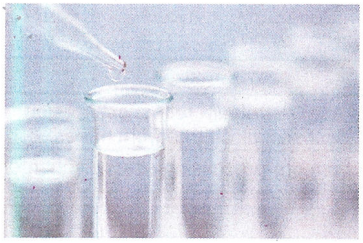


Figure (1)

- As water is pumped from the well, chlorine is added as a disinfectant to protect water from any bacteria in the distribution system. Water from all the wells then either flows into the pipes of the distribution system, where it is delivered to the tap and you, the consumer, or it is directed into storage tanks and held there until needed.

WATER QUALITY MONITORING FOR 2008



♦The 2008 NSFIH drinking water monitoring schedule involved collecting routine monthly samples for bacteria at several sites approved by the Maryland Department of Environment (MDE) and samples collected annually for nitrates, TTHM & HAA5 (disinfection byproducts), and Phase II/V metals. MDE assisted NSFIH in 2008 by taking samples for synthetic organic chemicals, volatile organic chemicals and radionuclides. All sample results were under the maximum contaminant levels required by EPA and MDE regulations.

♦Samples for iron exceeded Secondary Maximum Contaminant Levels (which are recommendations and not federally or state enforceable)

♦ Samples will be taken in 2009 for coliforms, arsenic, fluoride, nitrates, metals, disinfection by-products (total trihalomethanes and haloacetic acids), volatile organic chemicals and gross alpha. The results for these samples will appear in the 2010 Consumer Confidence Report.

♦ WATER QUALITY DATA CHART FOR 2008 ♦

(Of contaminants sampled in 2008, the highest result is listed – if no contaminant is detected "ND" is listed.)

Substance	Unit	MCL (Highest Level Allowed)	MCLG (EPA Goal)	Highest Level Detected	Major Source
MICROBIOLOGICAL CONTAMINANTS					
Total Coliform Bacteria	Samples	1 positive per month	0 positive	0 positives in year 2008	Naturally present in the environment
DISINFECTION BYPRODUCTS * **Total for all TTHMs combined cannot exceed the 0.080 level**					
Total Trihalomethane	mg/L	0.080	N/A	0.070	Byproduct of drinking water disinfection.
Haloacetic Acids	mg/L	0.060	N/A	0.019	Byproduct of drinking water disinfection.
Bromodichloromethane	mg/L	0.001/0.08*	0	0.0048	N/A
Bromoform	mg/L	0.001/0.08*	0	0.003	N/A
Chloroform	mg/L	0.001/0.08*	0	0.012	N/A
Dibromochloromethane	mg/L	0.001/0.08*	0.06	0.0058	N/A
INORGANIC CONTAMINANTS					
Antimony	mg/L	0.006	0.006	ND	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic	mg/L	0.10	0	ND	Erosion of natural deposits; runoff from orchards, runoff from glass & electronics production wastes
Barium	mg/L	2	2	ND	Discharge of drilling wastes and metal refineries; erosion of natural deposits.
Beryllium	mg/L	0.004	0.004	ND	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadium	mg/L	0.005	0.005	ND	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium	mg/L	0.1	0.1	ND	Discharge from steel and pulp mills; erosion of natural deposits
Copper	mg/L	1.3	1.3	0.029	Erosion of natural deposits.
Mercury	mg/L	0.002	0.002	ND	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and croplands
Nitrate	mg/L	10	10	ND	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Substance	Unit	MCL (Highest Level Allowed)	MCLG (EPA Goal)	Highest Level Detected	Major Source
INORGANIC CONTAMINANTS (continued)					
Selenium	mg/L	0.05	0.05	ND	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines
Thallium	mg/L	0.002	0.0005	ND	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
ORGANIC CONTAMINANTS					
Benzene	mg/L	0.005	0	ND	Discharge from factories; leaching from gas storage tanks and landfills
Carbon tetrachloride	mg/L	0.005	0	ND	Discharge from chemical plants and other industrial activities
0-Dichlorobenzene	mg/L	0.6	0.6	ND	Discharge from industrial chemical factories
p-Dichlorobenzene	mg/L	0.075	0.075	ND	Discharge from industrial chemical factories
1,2-Dichloroethane	mg/L	0.005	0	ND	Discharge from industrial chemical factories
1,1-Dichloroethylene	mg/L	0.007	0.007	ND	Discharge from industrial chemical factories
Cis-1,2-Dichloroethylene	mg/L	0.07	0.07	ND	Discharge from industrial chemical factories
Trans-1,2-Dichloroethylene	mg/L	0.1	0.1	ND	Discharge from industrial chemical factories
1,2-Dichloropropane	mg/L	0.005	0	ND	Discharge from industrial chemical factories
Di(2-ethylhexyl) p-phthalate	mg/L	0.006	0	0.0031	Discharge from rubber and chemical factories.
Ethylbenzene	mg/L	0.7	0.7	ND	Discharge from petroleum refineries
Hexachlorobenzene	mg/L	0.001	0	ND	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene	mg/L	0.05	0.05	ND	Discharge from chemical factories
Methylene Chloride	mg/L			ND	N/A
Mono-Chlorobenzene	mg/L	0.1	0.1	ND	Discharge from chemical and agricultural chemical factories
p-Dichlorobenzene	mg/L	0.075	0.075	ND	Discharge from industrial chemical factories
Styrene	mg/L	0.1	0.1	ND	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene	mg/L	0.005	0	ND	Discharge from factories and dry cleaners
Toluene	mg/L	1	1	ND	Discharge from petroleum factories
1,2,4-Trichlorobenzene	mg/L	0.07	0.07	ND	Discharge from textile finishing factories
1,1,1-Trichloroethane	mg/L	0.2	0.20	ND	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane	mg/L	0.005	0.003	ND	Discharge from industrial chemical factories
Trichloroethylene	mg/L	0.005	0	ND	Discharge from metal degreasing sites and other factories
Vinyl chloride	mg/L	0.002	0	ND	Leaching from PVC pipes; discharge from plastic factories
Xylenes, Total	mg/L	10	10	ND	Discharge from petroleum factories; discharge from chemical factories
RADIONUCLIDES					
Gross Beta	pCi/L	50	0	3.1	Decay of natural and man-made deposits
Gross Alpha	pCi/L	15	0	3.2	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation.
Radium - 226	pCi/L	5	0	0.1	Erosion of natural deposits.
Radium - 228	pCi/L	5	0	0.9	Erosion of natural deposits.
Combined Radium 226 & 228	pCi/L	5	0	0.1	Erosion of natural deposits.
Lead and Copper in Distribution System MCL determined in the 90th Percentile					
Lead	mg/L	0.015	N/A	0.002	Lead present in pipes and soldered connections dissolves into water.
Copper	mg/L	1.3	N/A	0.135	Copper from pipes dissolves into water.

Substance	Unit	MCL (Highest Level Allowed)	MCLG (EPA Goal)	Highest Level Detected	Major Source
Secondary Contaminants SMCLs are non-enforceable guidelines regulating contaminants that may cause cosmetic effects					
Iron	mg/L	SMCL 0.3	N/A	0.53	Erosion of natural deposits; household piping
UNREGULATED CONTAMINANTS Sampling not required by Federal or State Law					
Nickel	mg/L	0.1	N/A	ND	Erosion of natural deposits as ores containing other elements. Used in making stainless steel and other alloys.
Radon - 222	pCi/L	N/A	N/A	251	Erosion of natural deposits.
Sodium	mg/L	N/A	N/A	Range 62 to 146.2	N/A
Bromobenzene	ug/L	N/A	N/A	ND	N/A
Bromochloromethane	ug/L	N/A	N/A	ND	N/A
Bromomethane	ug/L	N/A	N/A	ND	N/A
Chloroethane	ug/L	N/A	N/A	ND	N/A
Chloromethane	ug/L	N/A	N/A	ND	N/A
Dibromomethane	ug/L	N/A	N/A	ND	N/A
Dichlorodifluoro methane	ug/L	N/A	N/A	ND	N/A
1,2-Dichloroethane	ug/L	0.005	0	ND	Discharge from industrial chemical factories
1,3-Dichloropropane	ug/L	0.005	0	ND	Discharge from industrial chemical factories
2,2-Dichloropropane	ug/L	N/A	N/A	ND	N/A
1,1-Dichloropropene	ug/L	N/A	N/A	ND	N/A
1,3-Dichloropropene	ug/L	N/A	N/A	ND	N/A
Hexachlorobutadiene	ug/L	N/A	N/A	ND	N/A
Isoproprylbenzene	ug/L	N/A	N/A	ND	N/A
m-Dichlorobenzene	ug/L	N/A	N/A	ND	N/A
Methyl-tert-butyl-ether	ug/L	N/A	N/A	ND	N/A
N-butylbenzene	ug/L	N/A	N/A	ND	N/A
n-Propylbenzene	mg/L	N/A	N/A	ND	N/A
Naphthalene	ug/L	N/A	N/A	ND	N/A
o-Chlorotoluene	ug/L	N/A	N/A	ND	N/A
p-Chlorotoluene	ug/L	N/A	N/A	ND	N/A
P-Isopropyltoluene	ug/L	N/A	N/A	ND	N/A
Sec-butylbenzene	ug/L	N/A	N/A	ND	N/A
Tert-butylbenzene	ug/L	N/A	N/A	ND	N/A
1,1,1,2-Tetrachloroethane	ug/L	N/A	N/A	ND	N/A
1,1,2,2-Tetrachloroethane	ug/L	N/A	N/A	ND	N/A
Trichlorofluoromethane	ug/L	N/A	N/A	ND	N/A
1,2,3-Trichloropropane	ug/L	N/A	N/A	ND	N/A
1,2,4-Trimethylbenzene	ug/L	N/A	N/A	ND	N/A
1,3,5-Trimethylbenzene	ug/L	N/A	N/A	ND	N/A

DEFINITIONS

Action Level – The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
Community Water System – A public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.
Inorganic Chemicals – Chemical substances of mineral origin, such as lead and copper.
Maximum Contaminant Level (MCL) – The highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum Contaminant Level Goal (MCLG) – The level of contaminant in drinking water below which there is no known or expected risk to health.
Microbiological Contaminants – Tiny organisms, such as bacteria, algae, plankton, and fungi.
Mg/L – Milligrams per liter; parts of contaminant per thousand parts of water
ND – Non-Detection. Laboratory analysis indicates the contaminate is not present.
ppm, ppb – part per million, part per billion. Measurements of the amount of contaminant per unit of water. One part per million corresponds to one minute in two years or a single penny in $10,000 and a part per billion is like a penny in $10,000,000.
pCi/L – picocuries per liter (a measure of radioactivity in water)
Secondary Maximum Contaminant Level (SMCL) – These levels represent reasonable goals for drinking water quality and are not federally enforceable.
Trihalomethanes (THM) – Four separate compounds (chloroform, dichlorobromomethane, dibromochloromethane, and bromoform) that form as a result of disinfection.
Ug/L – Micrograms per liter; parts of contaminant per million parts of water
Unregulated Contaminants – Substances that do not pose a threat to public health or are under consideration for further study to determine if a health risk exists.

Source Water Assessment

The Maryland Department of the Environment performed a source water assessment several years ago for 25 non-transient non-community water systems in Charles County, including the Stump Neck Annex water system. The required components of this report are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply system to contamination. For information on the Source Water Assessment report, go to www.mde.state.md.us/Programs/WaterPrograms/WaterSupply/sourcewaterassessment/index.asp.

STATEMENT ABOUT LEAD

(This statement is required by 2009 EPA promulgated revisions to the CCR)

" If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. NSFIH is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791 or at http://www.epa.gov/safewater/lead."

Pacific Ocean 2004 Photo of Plastic Debris

?? FAQs ??

Isn't bottled water safer than tap water?

Not necessarily. Studies have found while the majority of bottled water brands are high quality water and mostly free of contaminants there are some that may pose a threat to persons with compromised immune systems. Recent research also suggests a concern that phthalates, which disrupt testosterone and other hormones, can leach from plastic bottles over a period of time. And, although there are regulatory standards limiting phthalates in tap water, there are no legal limits for phthalates in bottled water.

If you are concerned that you are buying bottled "tap" water check the label and cap. If the water is derived from a municipal source or a community water system then its from a tap. A good source of information on bottled water issues is the Natural Resources Defense Council (NRDC) at http://www.nrdc.org/water/drinking/qbw.asp.

Another safety aspect concerning bottled water is the trashing of the plastic bottles into the environment. As seen in the photo to the left, disposal of plastic bottles has become a major concern. A vortex, the size of the State of Texas, of plastic trash has formed in the Pacific Ocean and threatens marine and bird species. To read more on this threat to the oceans go to http://www.greenpeace.org and search for Pacific Ocean trash.

Has NSFIH drinking water been tested for perchlorates?

Yes. The test results for the first round of sampling showed that perchlorates were detected at a minimal level (level too low to quantify using current standard analytical method) and repeat sampling results showed that no perchlorates were detected in any of the NSFIH or Stump Neck Annex drinking water wells.

In May 2006 the Navy issued a Perchlorate Sampling and Management Policy requiring all Navy-owned drinking water systems to sample for perchlorate. All wells at NSFIH and Stump Neck Annex were tested and samples were sent to a qualified lab using mass spectrometry analysis procedures as required in the DoD Perchlorate Handbook. At that, time the "level of concern" established by the Navy was 24 parts-per-billion.

Results of samples taken at NSFIH in September 2006 showed that the perchlorate analyte was positively identified but the level was below the standard detection limit for the test method. It was noted from the results of other installations that chlorine may be an intereference in the analysis of the perchlorate samples. In December 2006, a second round of samples were taken, but this time the samples were collected at sites before chlorination. Results of the December samples showed that no perchlorate was detected.

A memo updating the Navy policy on perchlorates was issued in April 2009. This memo stated that a preliminary remediation goal was set at 15 ppb for perchlorate. Installations that do not meet the new limit or have not previously sampled for perchlorate are directed to do so. Since previous rounds of testing reported minimal and non-detect results, NSFIH will not be required to do further sampling.

For Additional Information

- **For more information on the Consumer Confidence Report or water quality, please contact the persons listed.**

Consumer Confidence Report:
Kathy Frey, Code PRIH41KF
NSFIH
Environmental Program Office
Phone: 301-744-2258
FAX: 301-744-4180
Email: mary.frey@navy.mil

Water Quality:
Dave Stewart
Code: NAVFACWASH IH Det
Public Works Center Utilities
Phone: 301-744-4818
FAX: 301-744-4950
Email: david.j.stewart1@navy.mil